to previous treatment may not reap the benefit of survival improvement because they were already in a terminal stage at the time of stent placement. Interventional pulmonologists should be aware of the discouraging prognosis and the risk of impediments for terminal patients, especially in cases of multiple stent placements.

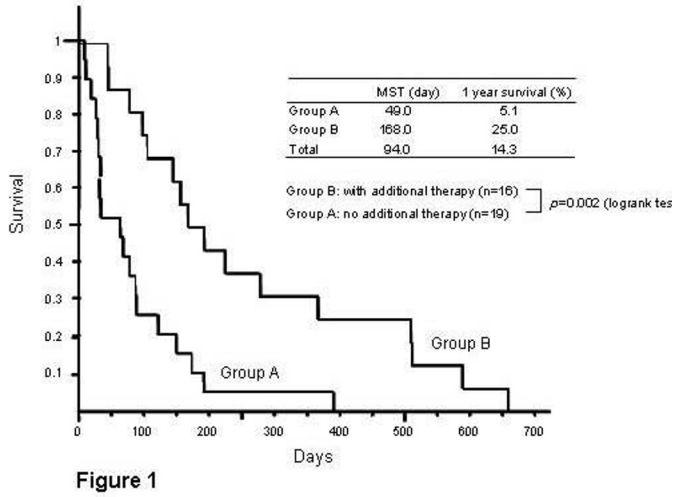

Figure 1

therapy (RT), 10 (11%) had RT alone and one (1%) received concurrent chemoradiotherapy. The remaining 69 patients (75%) had their multiple ISCC treated with endobronchial electrosurgery or cryotherapy. At the end of our study period, 123 individuals (54%) were alive, and 105 (46%) deceased. Lung cancer-related mortality (Fig 1) was 21% (6.3%/year) and the all cause mortality was 46%.

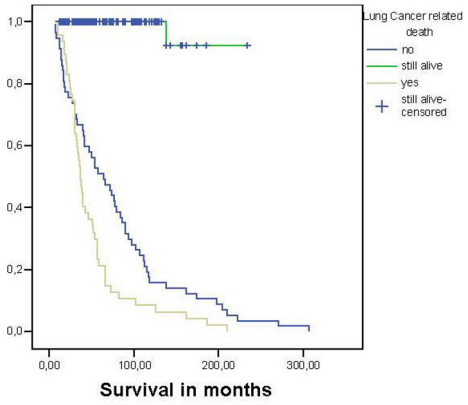

Figure 1: Lung cancer related mortality

C4-03 **Chest Medicine, Wed, 10:30 - 12:15**

Early detection and intervention for central airway cancers: 10 year experience

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Background: Lung cancer accounts for more deaths than breast, prostate and colon cancers combined. Prognosis and survival depend on the stage of disease, and since more than two thirds of patients with lung cancer have mediastinal lymph node or distant metastases at presentation, it is not surprising that cure rate remains dismal at 15%.

Aim: To determine if early detection and intervention for central airway lung cancer could impact outcome of patients at risk.

Methods: All current or former smokers with ≥1 aerodigestive cancers were recruited for the program beginning January 1996 to December 2005 and prospectively followed till December 2006. Autofluorescence bronchoscopy was performed with LIFE® (Xilix, BC, Richmond Canada) every 3-6 months, and where indicated, bronchoscopic treatment was applied as an alternative to surgery or to enable less extensive resection whenever feasible. Values are presented as median and range, and lung cancer related mortality is calculated by Kaplan Meier method.

Results: There were 228 individuals, 190 males with median age 69 years (range, 62-75). They smoked 40 median pack years (range, 34-50), and 70% had COPD with median FEV1 % predicted 53% (range, 39-70). Follow-up was 40 months (range, 22-79), and the indications were: surveillance after lung cancer surgery in 94 patients (41%); previous ENT cancer in 32 (14%); suspected occult lung cancer in 92 (41%); and known lung cancer in 10 (4%). There were 111 patients with one lung cancer, and 99 with 2 or more lung cancers. A total of 217 new lung cancers were diagnosed: AF detected 181 and 36 by CT. Of the 92 patients with intraluminal squamous cell cancers (ISCC), 12 (13%) underwent surgery with one requiring post-operative radio-

Conclusions: Our results validate efforts towards early detection and intervention for this high risk group with ≥ 1 cancers. Bronchoscopic treatment could emerge as an effective alternative to surgery for early detected ISCC.

C4-04 **Chest Medicine, Wed, 10:30 - 12:15**

Discriminating value of three bronchoscopic techniques - autofluorescence bronchoscopy, autofluorescence spectroscopy and narrow band imaging

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Background: The bronchial mucosa is the tissue first exposed to different cancerogenes including tobacco smoke. Pathologic changes in the mucosa evolve from basal cell hyperplasia to epithelial dysplasia and cancer in situ. This process causes subtle changes in chemical composition and blood supply of mucosa and thickness of the basal membrane. This is why the processing of autofluorescent signal from the bronchial mucosal surface is gaining increasing interest recently. Significant weakness of commercial autofluorescence systems is low specificity caused by decreased fluorescence of the mucosa changed by chronic inflammation or other non-malignant endobronchial conditions.

Methods: In order to increase specificity of the auto fluorescent device we have tested system utilizing spectroscopic point monitoring of suspicious endobronchial locations. Every AFB positive location has been measured by this system and than visualized by NBI system. Evaluated group consisted of 30 patients with autofluorescence positive endobronchial locations.

Results and Conclusion: We have picked up some typical differences in autofluorescence spectra's between malignant and non-malignant tissues which are shown in graphs. We have also found that NBI tissue characteristics are very useful in discriminating between endobronchial

